



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XB046

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Reef Fish and Red Drum Fisheries of the Gulf of Mexico; Amendments 48/5

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of availability; request for comments.

SUMMARY: Combined in a single document, the Gulf of Mexico (Gulf) Fishery Management Council (Gulf Council) has submitted Amendment 48 to the Fishery Management Plan (FMP) for Reef Fish Resources of the Gulf of Mexico and Amendment 5 to the FMP for the Red Drum Fishery of the Gulf of Mexico (Amendments 48/5) for review, approval, and implementation by NMFS. Amendments 48/5 would establish or modify maximum sustainable yield (MSY) proxies, maximum fishing mortality thresholds (MFMTs), minimum stock size thresholds (MSSTs), and optimum yield (OY) for stocks in the Reef Fish and Red Drum FMPs. The need for this action is to have biological reference points that can be used for determining status of the stocks or stock complexes consistent with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

DATES: Written comments on Amendments 48/5 must be received by *[insert date 60 days after date of publication in the FEDERAL REGISTER]*.

ADDRESSES: You may submit comments on Amendments 48/5 identified by "NOAA-NMFS-2021-0023" by either of the following methods:

- *Electronic Submission:* Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to <https://www.regulations.gov> and enter "NOAA-NMFS-2021-0023" in the Search box. Click on the "Comment" icon, complete the required fields, and enter or attach your comments.

- *Mail:* Submit written comments to Peter Hood, NMFS Southeast Regional Office, 263 13th Avenue South, St. Petersburg, FL 33701.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

Electronic copies of Amendments 48/5 may be obtained from www.regulations.gov or the Southeast Regional Office website at <http://sero.nmfs.noaa.gov>. Amendments 48/5 includes an environmental assessment and fishery impact statement.

FOR FURTHER INFORMATION CONTACT: Peter Hood, NMFS Southeast Regional Office, telephone: 727-824-5305, or email: peter.hood@noaa.gov.

SUPPLEMENTARY INFORMATION: The Magnuson-Stevens Act requires each regional fishery management council to submit any FMP or amendment to the FMP to NMFS for review and approval, partial approval, or disapproval. The Magnuson-Stevens Act also requires that NMFS, upon receiving a plan or amendment to the plan, to publish an announcement in the **Federal Register** notifying the public that the FMP or amendment to the FMP is available for review and comment.

Amendments 48/5 were prepared by the Gulf Council and, if approved, would be incorporated into the management of Gulf reef fish and red drum through the respective FMPs.

Background

The Magnuson-Stevens Act and the National Standard 1 Guidelines require that FMPs specify a number of reference points for managed fish stocks, including maximum sustainable yield (MSY) or MSY proxy, and optimum yield, as well as status determination criteria (SDC), including an MFMT or an overfishing limit (OFL), and an MSST. These SDC

represent the point at which a stock is determined to be overfished (*i.e.*, below MSST) or experiencing overfishing (*i.e.*, above MFMT or OFL). In 1999, the Gulf Council submitted the Generic Sustainable Fisheries Act (SFA) Amendment, which proposed definitions of MSY, OY, MFMT, and MSST for all reef fish stocks. NMFS approved most of the MFMT criteria, but disapproved all of the definitions for MSY, OY, and MSST because they were not based on biomass.

While NMFS refers to the document as "Amendments 48/5" in this notice of availability, each amendment applies separately to the stocks in the respective FMPs. Amendment 5 applies to the red drum stock. Amendment 48 applies to several reef fish stocks and stock complexes that either have not been assessed or were assessed but still require stock status determinations. These include: cubera snapper, lane snapper, goliath grouper, the shallow-water grouper complex (scamp, black grouper, yellowmouth grouper, and yellowfin grouper), the deep-water grouper complex (yellowedge grouper, warsaw grouper, snowy grouper, and speckled hind), the tilefish complex (golden tilefish, blueline tilefish, and goldface tilefish), the jacks complex (lesser amberjack, almaco jack, and banded rudderfish), and the mid-water snapper complex (wenchman, silk snapper, blackfin snapper, and queen snapper). Amendments 48/5 also addresses four reef fish stocks that have been assessed and have known stock status

determinations: hogfish, mutton snapper, yellowtail snapper, and black grouper. Amendment 43 to the Reef Fish FMP established reference points and SDC for hogfish. However, OY for hogfish was not defined there and is addressed in Amendments 48/5. Mutton snapper, yellowtail snapper, and black grouper, which occur in both the Gulf Council and South Atlantic Fishery Management Council areas of jurisdiction but are managed separately under each Council's FMPs, have reference points and SDC specified in the South Atlantic Snapper-Grouper FMP, but not in the Gulf Reef Fish FMP. With respect to black grouper, that species is managed by the South Atlantic Council as a single stock but is managed by the Gulf Council as part of the shallow-water grouper complex.

Maximum Sustainable Yield

The MSY is the largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological, environmental conditions and fishery technological characteristics (e.g., gear selectivity), and the distribution of catch among fleets. However, the actual MSY can rarely be estimated with certainty because of the difficulty in accurately estimating the relationship between the size of the spawning stock and the subsequent annual recruitment. As a result, proxies for MSY are typically used because they are easier to measure. Generally, MSY proxies used for fish species in the Gulf

are based on some percentage of spawning potential ratio (SPR) and are expressed as the yield when fishing at F_{PROXY} (where F is fishing mortality rate). In using SPR, NMFS assumes that a certain amount of fish must survive and spawn in order to replenish the stock, thus SPR represents the average number of eggs per fish over its lifetime when the stock is fished, compared to the average number of eggs per fish over its lifetime when the stock is not fished. A sustainable SPR depends on the life history of the species, but in general, is between 20 percent and 40 percent for reef fish species. The advantage of using SPR as a proxy is that it requires less information to calculate than MSY.

For reef fish stocks and stock complexes with the exception of goliath grouper, the MSY proxy selected by the Gulf Council is the yield when fishing at $F_{30\% \text{ SPR}}$. This is the proxy most commonly recommended by the Gulf Council's SSC for assessed reef fish stocks and the SSC recommended this MSY proxy for the reef fish stocks and stock complexes in Amendment 48. For goliath grouper, the Gulf Council selected a more conservative MSY proxy because this species is more vulnerable to overfishing because of its long life-span and slow growth rate. The goliath grouper MSY proxy is the yield when fishing at $F_{40\% \text{ SPR}}$. The MSY proxies for goliath grouper, mutton snapper and yellowtail snapper are consistent with MSY proxy selected by the South Atlantic Council.

The harvest of red drum is prohibited in Federal waters, but fishing is allowed in state waters under management measures developed by the respective Gulf state marine fisheries agencies. These agencies manage the stock to achieve a 30 percent escapement rate from state to Federal waters. Thus, Amendments 48/5 would define the red drum MSY proxy as the yield that provides for an escapement rate of juvenile fish to the spawning stock biomass (SSB) equivalent to 30 percent of those that would have escaped had there been no inshore state-waters fishery.

Amendments 48/5 would also adopt a streamlined procedure for future specification of the MSY proxies for reef fish stocks and red drum. This procedure would allow the Gulf Council to adopt an MSY proxy recommended by the SSC by including a discussion of the change in a plan amendment. If the Council chooses to use this procedure, which would not include the consideration of alternatives to the MSY proxy recommended by the SSC, NMFS expects the Council to document its rationale for that decision. If more than one MSY proxy is supported by the best scientific information available, NMFS expects the Council to provide an appropriate analysis of these alternatives.

Maximum Fishing Mortality Thresholds

MFMT is the rate of fishing mortality above which a stock is experiencing overfishing. Overfishing can also be determined using the OFL, which is the annual amount of

catch that corresponds to fishing at MFMT. Consistent with the Generic Annual Catch Limits and Accountability Amendment, NMFS uses the MFMT to determine overfishing for stocks or stock complexes that have stock assessments only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments, NMFS uses catch compared to the OFL to determine overfishing.

The Generic SFA Amendment set MFMT equal to $F_{50\% \text{ SPR}}$ for goliath grouper, equal to $F_{30\% \text{ SPR}}$ for red drum, and equal to $F_{30\% \text{ SPR}}$ for all reef fish stocks except red snapper (MFMT = $F_{26\% \text{ SPR}}$). To keep MFMT consistent with the proposed MSY proxies, Amendments 48/5 would set this threshold for the relevant stocks equal to the F at the MSY proxy for each stock or stock complex as discussed above.

Minimum Stock Size Thresholds

The MSST is a biomass reference point that measures how many fish are left in the water rather than how many fish are caught, and determines at what biomass level a stock or stock complex is overfished. The MSST can be specified in terms of pounds of fish, numbers of fish, or the expected egg production from the SSB of the adult stock. The long-term average size of a stock that results from harvesting at MSY is called the biomass at MSY (B_{MSY}). If the stock level falls below B_{MSY} , it cannot sustain harvest at the MSY level without further depletion.

However, biomass may fluctuate over time because of changes in environmental conditions, recruitment to the stock, or other variables. Because of these natural fluctuations, the MSST is generally set at some level below B_{MSY} , but cannot be set lower than 50 percent of B_{MSY} . The greater the difference between B_{MSY} and MSST, the less likely a stock is to be declared overfished, but the more difficult it may be to rebuild the stock back to B_{MSY} should the stock size fall below MSST.

In Amendments 48/5 the Council considered several alternatives for MSST that would apply to all of the stocks and stock complexes for which the Council is also establishing MSY and MFMT. These alternatives ranged from $(1-M)*B_{MSY}$ (or proxy), where M is the natural mortality, to $0.50*B_{MSY}$ (or proxy), and the Council chose to set MSST for these stocks and stock complexes at $0.75*B_{MSY}$ (or proxy). This value is between the B_{MSY} (or proxy) stock level and the 50 percent of B_{MSY} (or proxy) level used by the Gulf Council for assessed reef fish stocks as defined in Amendment 44 to the Reef Fish FMP. The Gulf Council determined that this more conservative value is appropriate for the unassessed stocks and stock complexes addressed in Amendments 48/5. The Council also considered and selected an additional alternative that would apply only to those individual stocks that span both the South Atlantic and Gulf Councils' areas of jurisdiction and would set MSST

consistent with the MSST specified by the South Atlantic Council. These stocks are goliath grouper, black grouper, mutton snapper, and yellowtail snapper. The MSST specified by the South Atlantic Council is $0.75 \cdot B_{MSY}$ (or proxy) for black grouper, mutton snapper, and yellowtail snapper, and $(1-M) \cdot B_{MSY}$ (or proxy) for goliath grouper.

As discussed previously, and unlike the South Atlantic Council, the Gulf Council manages black grouper as part of the shallow water grouper complex, not as a single stock. Therefore, although black grouper was included in preferred alternative 5 that addressed the other three stocks that span both the South Atlantic and Gulf Councils' areas of jurisdiction, Amendment 48 does not consider specifying an MSY for black grouper as a single stock. Instead, consistent with the Gulf Council's current management of this stock, Amendment 48 would specify an MSY for the entire shallow-water grouper complex, which includes black grouper. NMFS invites specific comments on the part of Amendments 48/5 that proposes to specify MSST for black grouper as a single stock.

Optimum Yield

The Magnuson-Stevens Act and NS1 guidelines state that OY is based on MSY as reduced by relevant economic, social, or ecological factors. Additionally, the NS1 guidelines state that OY should include some consideration of uncertainty. If the estimates of MFMT and current biomass

are known with a high level of certainty, and management controls can accurately limit catch, then OY could be set very close to MSY, assuming no other reductions are necessary for social, economic, or ecological factors. However, OY cannot exceed MSY. To the degree that such MSY estimates and management controls are lacking or unavailable, OY should be reduced farther from MSY.

For the assessed reef fish stocks that are not addressed in Amendments 48/5, the Gulf Council has defined OY as the yield from fishing at some percentage of F_{MSY} (or proxy). However, the NMFS Southeast Fisheries Science Center (SEFSC) staff and the Gulf Council's SSC have recommended against specifying OY as the yield at a certain value of F . They have suggested instead that OY be a percentage of MSY for three reasons: 1) if OY is specified as a percentage of F_{MSY} (or proxy), SEFSC staff would need to provide two sets of yield projections when running stock assessments (one for MSY and one for OY), adding complexity to the projections; 2) it is possible that the calculated long-term yield at the F_{OY} proxy could be greater than the calculated long-term yield at the F_{MSY} proxy, which would be inconsistent with the Magnuson-Stevens Act and NS1 guidelines; and 3) defining OY as a percent of MSY is more intuitive and easier to understand than using a percentage of the F_{MSY} proxy to define OY. Therefore, the Gulf Council proposes setting OY at 90 percent of the MSY or MSY proxy

for all reef fish stocks addressed in Amendments 48/5 with the exception of goliath grouper.

For goliath grouper, the Council proposes using the ratio between the annual catch limit (ACL) and OFL to determine how much the OY should be reduced from the MSY. This relationship accounts for scientific and management uncertainty and would apply that knowledge to guide where OY should be set relative to MSY for this stock. Because possession of goliath grouper is prohibited, the OY value would be zero.

For red drum, the Gulf Council decided to keep the existing OY definition, which is based on a 1987 SEFSC stock assessment that concluded under certain escapement rates of juveniles, the stock could rebuild. This OY definition is: 1) all red drum commercially and recreationally harvested from Gulf state waters landed consistent with state laws and regulations under a goal of allowing 30 percent escapement of the juvenile population; and 2) all red drum commercially or recreationally harvested from the Primary Area (Louisiana, Mississippi, and Alabama) of the exclusive economic zone (EEZ) under the total allowable catch (TAC) level and allocations specified under the provisions of the Red Drum FMP, and a zero-retention level from the Secondary Areas (Florida and Texas) of the EEZ. The red drum TAC for the Gulf EEZ has been zero since 1988 with the implementation of Amendment 2

to the Red Drum FMP and harvest in the EEZ is prohibited (53 FR 34662; June 29, 1988). Therefore, to achieve the OY, the Gulf states have independently and cooperatively implemented red drum regulations to achieve a 30 percent or greater escapement rate to the spawning stocks for each year class.

Procedural Aspects of Amendments 48/5

The Council has submitted Amendments 48/5 for Secretarial review, approval, and implementation. NMFS' decision to approve, partially approve, or disapprove Amendments 48/5 will be based, in part, on consideration of comments, recommendations, and information received during the comment period on this notice of availability. After consideration of these factors, and consistency with the Magnuson-Stevens Act and other applicable laws, NMFS will publish a notice of agency decision in the **Federal Register** announcing the Agency's decision to approve, partially approve, or disapprove Amendments 48/5. Because none of the measures included in the amendments involve regulatory changes, no proposed or final rule is required at this time. If approved, the provisions of Amendments 48/5 would not be specified in regulations but would be considered amendments to the respective FMPs.

Consideration of Public Comments

Comments on Amendments 48/5 must be received by
[insert date 60 days after publication in the FEDERAL

REGISTER]. Comments received during the comment period for this notice of availability will be considered by NMFS in its decision to approve, partially approve, or disapprove Amendments 48/5. Comments received after the comment period will not be considered by NMFS in this decision. All comments received by NMFS during the comment period will be addressed in the notice of agency decision.

Authority: 16 U.S.C. 1801 et seq.

Dated: March 3, 2022.

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Acting Director, Office of Sustainable Fisheries,
National Marine Fisheries Service.